

IN THE CLAIMS:

Claims 8, 11 and 14 have been amended. New claim 15 has been added. Claim 10 has been canceled. This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1 to 7 (canceled).

Claim 8 (currently amended): A method for performing inter-vehicle distance control on a vehicle comprising:

determining an actual value of a distance variable describing a distance between the vehicle and a vehicle traveling in front;

determining a plurality of weighting values for the distance variable as a function of input variables describing a driving situation of the vehicle and/or an ambient situation of the vehicle and/or a driving behavior of a driver ~~and determining a set point value for the distance variable as a function of the input variables;~~

multiplying the weighting values by one another to determine a combined value of the distance variable;

restricting the combined point value by a predefined range of an upper limiting value and a lower limiting value when the combined value is outside the predefined range of the upper limiting value and the lower limiting value to determine a set point value of the distance variable;
and

actuating a brake and/or driving device of decreasing a velocity of the vehicle when the determined actual value of the distance variable is less than the determined set point value of the distance variable and increasing the velocity of the vehicle when the determined actual value of the distance variable is greater than the determined set point value of the distance variable so that the determined actual value of the distance variable assumes the determined set point value of the distance variable; ~~and~~

~~multiplying the weighting values by one another to determine the set point value of the distance variable.~~

Claim 9 (previously presented): The method as claimed in claim 8 wherein to determine the set

point value of the distance variable a geometric average of the weighting values is formed.

Claim 10 (canceled).

Claim 11 (currently amended): The method as claimed in claim 10 wherein ~~the value range is defined by predefining an upper and a lower limiting value for the multiplied weighting values,~~ the upper and lower limiting values ~~being~~ are predefined as a function of driving state variables describing the driving state of the vehicle.

Claim 12 (previously presented): The method as claimed in claim 8 wherein the multiplied weighting values for determining the set point value of the distance variable are multiplied by a predefined reference value for the distance variable, the reference value being predefined as a function of driving state variables describing the driving state of the vehicle.

Claim 13 (previously presented): The method as claimed in claim 11 further comprising issuing a driver warning to the driver of the vehicle if the determined actual value of the distance variable drops below the set point value of the distance variable given by the lower limiting value of the multiplied weighting values.

Claim 14 (currently amended): A device for performing inter-distance control on a vehicle comprising:

an evaluation unit determining an actual value of a distance variable describing a distance between the vehicle and a vehicle traveling in front,

the evaluation unit determining a plurality of weighting values for the distance variable as a function of input variables describing a driving situation of the vehicle and/or an ambient situation of the vehicle and/or a driving behavior of a driver,

the evaluation unit in turn ~~determining as a function of the weighting values a set point value for the distance variable~~ multiplying the weighting values by one another to determine a combined value of the distance variable and restricting the combined point value by a predefined range of an upper limiting value and a lower limiting value when the combined value is outside

the predefined range of the upper limiting value and the lower limiting value to determine a set point value of the distance variable,

~~the evaluation unit actuating a brake and/or driving device of decreasing a velocity of the vehicle when the determined actual value of the distance variable is less than the determined set point value of the distance variable and increasing the velocity of the vehicle when the determined actual value of the distance variable is greater than the determined set point value of the distance variable so that the determined actual value of the distance variable assumes the determined set point value of the distance variable, and to determine the set point value of the distance variable the evaluation unit multiplies the weighting values by one another.~~

Claim 15 (new): A method for performing inter-vehicle distance control on a vehicle comprising:

determining an actual value of a distance variable describing a distance between the vehicle and a vehicle traveling in front;

determining a plurality of weighting values for the distance variable as a function of input variables, a first of the weighting values being a function of an accelerator pedal deflection, a second of the weighting values being a function of a driving ability of the driver of the vehicle, a third of the weighting values being a function of a state of the road and a fourth of the weighting values being a function of an acceleration behavior of the vehicle traveling in front in relation to the vehicle;

multiplying at least two of the weighting values by one another to determine a set point value of the distance variable; and

actuating a brake and/or driving device of the vehicle so that the determined actual value of the distance variable assumes the determined set point value of the distance variable.